

Please amend the specification as follows:

Please replace paragraph 0059 appearing on page 16 with the following:

[00059] Fig. 2a is a high level block diagram of a multiple power source system 180 sharing a common load in accordance with the principle of the invention, in which control is maintained over an external variable current limited power source thus enabling variable power sharing between an internal power supply and the external variable current limited power source. Multiple power source system 180 comprises: variable current limited power sources 220a, 220b and 220c, generally referred to as variable current limited power source 220; modules 200a, 200b and 200c, generally referred to as module 200; loads 60a, 60b and 60c, generally referred to as load 60; controller 190 and optional power bus 70. Three variable current limited power supplies 220, modules 200 and loads 60 are shown, however this is not meant to be limiting in any way. Any number of variable current limited power supplies 220, modules 200 and loads 60 can be connected in a similar manner without exceeding the scope of the invention. Module 200 comprises external power input 224, internal power supply 240, load sharing diodes 50 and power output 226. Variable current limited power source 220 is connected to power input 224 of module 200, and load 60 is connected to power output 226 of module 200. ~~module 230~~. Power supply 240 and power input 224 are connected in a “wired or” configuration through first and second load share diodes 50 to power output 226 of module 200. An output of controller 190 is connected as an input to each of variable current limited power sources 220a, 220b and 220c. Optional power bus 70 is connected to each of variable current limited power sources 220a, 220b and 220c.

Please replace paragraphs 0075 - 0076 beginning on page 24 with the following:

[00075] Fig. 2c is a high level block diagram of a multiple power source system 510 sharing a common load in accordance with the principle of the invention, in which the output of the internal power supply is monitored; the power requirement of the load is monitored and controlled by a local power controller; and control is maintained over an external variable current limited power source in response to an output of the local power controller. Multiple power source system 510 comprises: power supply 515; variable current limited power sources 220a, 220b and 220c, generally referred to as variable current limited power source 220; modules 530a, 530b and 530c, generally referred to as module 530; loads 460a,

460b and 460c, generally referred to as load 460; controller 550; variable current limiter 570 and optional power bus 70. Three variable current limited power supplies 220, modules 530, variable current limiter 570 and loads 460 are shown, however this is not meant to be limiting in any way. Any number of variable current limited power supplies 220, modules 530, variable current limiters 570 and loads 460 can be connected in a similar manner without exceeding the scope of the invention.

[00076] Module 530 comprises external power input 224, internal power supply 240, local power controller 580, variable current limiter 575, load sharing diodes 50 and power output 226. The output of power supply 515 is connected via optional power bus 70 to each of variable current limited power sources 220a, 220b and 220c. Variable current limited power source 220 is connected to power input 224 of module 530 via a respective variable current limiter 570, and load 460 is connected to power output 226 of module 530. Local power controller 580 is connected to load 460, ~~variable current limiter 575~~ and to variable current limiter 575, so as to monitor power output 226 and optionally so as to monitor the output of power supply 240. An output of local power controller 580 is connected to controller 550. Power supply 240 connected through variable current limiter 575, and power input 224 are connected in a “wired or” configuration through first and second load share diodes 50 to power output 226 of module 530. An output of controller 550 is connected as an input to each of variable current limited power sources 220a, 220b and 220c, and as an input to each variable current limiter 570. Optional power bus 70 is connected to each of variable current limited power sources 220a, 220b and 220c and supplies power from power supply 515 thereto.

Please replace paragraph 0082 on page 28 with the following:

[00082] In the event of a failure of either external power supply 220 or internal power supply 240, current which is limited by the setting of variable current limiter 570 and 575 respectively, will be drawn from the non-failed power supply. The use of variable current limiters 570, 575 thus prevents an overload condition for either variable current limited power supply 220 or power supply 240. Furthermore, variable current limiter 570 prevents an overload of power supply 220 from spilling over to optional power bus 70. In an exemplary embodiment, power supply 515 supplies power at a voltage lower than that of power supply 240, and variable current limited power source 220 acts as a boost converter.

In the event of a failure of power supply 240, variable current limited power source 220 is unable to maintain the boost voltage, and power is passed through near the lower voltage of power supply 515 to the respective module 530 limited by variable current limiter 570.

Please replace paragraph 00099 on page 35 with the following:

[00099] Fig. 4b is a high level schematic diagram of an embodiment of power converter 810 of Fig. 4a, shown as a DC/DC converter comprising input capacitor 860, inductor 870, ~~pulse width modulation or resonance controller 880 and switch 890~~ pulse width modulation or resonance controller 880, switch 890, diode 840 and output capacitor 895. In operation DC/DC converter 810 operates as a boost converter under control of pulse width modulation controller 880 to increase the DC output voltage above the input voltage.

Please replace paragraph 000123 on page 43 with the following:

[000123] If in step 2250 the power output of power supply 240 would not exceed the desired operating parameters, thus based on step 2230 the power output of power supply 240 is below the desired operating parameters, in step 2280 controller 450 is operative to reduce ~~reduces~~ the amount of current or power which may be drawn by load 460 under control of local power controller 480.

Please replace paragraph 00143 beginning on page 49 with the following:

[000143] Thus the present invention provides for a system of supplying additional power to modules having an associated power supply not designed for load sharing. Typically, the associated power supply is an internal ~~power~~ power supply. Power sharing is accomplished by connecting a variable current limited power source in a “wired or” configuration with the associated power supply. The voltage level and current limit of the variable current limited power source is set to supply a share of the total load current, with the balance of the current being supplied by the associated power supply. This is accomplished without having any connection required between the associated power supply and the variable current limited power source.